



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,538	06/21/2005	Claudia Becker	P0837US00/RFH	1217
881	7590	12/07/2009	EXAMINER	
STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			LOUIE, OSCAR A	
ART UNIT	PAPER NUMBER			
		2436		
MAIL DATE	DELIVERY MODE			
12/07/2009	PAPER			

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/506,538	BECKER ET AL.
	<b>Examiner</b> OSCAR A. LOUIE	<b>Art Unit</b> 2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 03 August 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s)       is/are withdrawn from consideration.

5) Claim(s)       is/are allowed.

6) Claim(s) 1-15 is/are rejected.

7) Claim(s)       is/are objected to.

8) Claim(s)       are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on       is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No.      .
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date      

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date      

5) Notice of Informal Patent Application

6) Other:

**DETAILED ACTION**

This final action is in response to the amendment filed on 08/03/2009. Claims 1-15 are pending and have been considered as follows.

***Examiner Note***

In light of the applicants' amendments and remarks the examiner hereby withdraws his previous 35 U.S.C. 112 2<sup>nd</sup> paragraph rejections, Specification Objection, and 35 U.S.C. 101 rejections. Specifically, the 35 U.S.C. 101 rejections have been overcome due to the support found in at least pages 1-4 of the applicants' Specification which defines the "access control module device" as equivalent to a microprocessor card with a security processor and memory onboard.

***Claim Objections***

1. Claim 1 is objected to because of the following informalities:
  - Claim 1 line 1 recites "for" which should be "...of..." as the current claim language suggests intended use;

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 & 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1 recites the limitation "the validity" in line 8. There is insufficient antecedent basis for this limitation in the claim.
- Claim 4 recites the limitation "said first entry" in line 4. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candelore (US-6697489-B1).

Claim 1:

Candelore discloses a method for entering, disabling/crasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being

entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the validity of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting said control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20] comprising,

- "transmitting from said transmission center to each descrambling terminal and to the access control module device linked to said method at least one access right management message, said message comprising at least, in addition to an entered access right identification variable, an action date variable and a status assignment variable, the encoded value corresponding to an enabled access right, a disabled access right or an erased access right; and on receipt of said access right management message, at said access control module device" (i.e. "These copy management commands may also be transmitted along with entitlement control messages ( ECM), which are generally used by the conditional access unit to regulate access to a particular channel or service.

Entitlement management messages ( EMM) may be used to deliver privileges to the digital receiver 111 such as rights, access parameters, and descrambling keys" [column 3 line 67 & column 4 lines 1-6];

- "allocating said status assignment variable corresponding to an enabled access right, a disabled access right or an erased access right to said status variable of said corresponding entered access right" (i.e. "The access requirements and entitlements thus form a part of the access control system to determine whether a decoder is authorized to view a particular program") [column 4 lines 62-65];

but, Candelore does not explicitly disclose,

- "forming any access right entered in said access control module device as a set of independent variables and linked variables comprising at least, in addition to an access right identification variable, an entered access right action date variable and a status variable which can have one of three encoded values signifying access right enabled, access right disabled, access right erased," although Candelore does suggest entitlements, as recited below;
- "assigning said action date to the entered access right corresponding to the access right identification variable of said access right management message," although Candelore does suggest a validity time, as recited below;

however, Candelore does disclose,

- "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more

keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65];

- "the Service Key may be valid for a certain period of time" [column 8 lines 66-67];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "assigning said action date to the entered access right corresponding to the access right identification variable of said access right management message," in the invention as disclosed by Candelore for the purposes of providing access control for subscriber content.

Claim 2:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key

stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word"") [column 3 lines 10-20], as in Claim 1 above, further comprising,

- "for an operation to enter a defined access right in an access control module device, said action date variable of said access right management message corresponds to an entry date, and the status assignment variable is an encoded value corresponding to an enabled right, the entry operation consisting in entering, into said access control module device, a defined access right, the action date of which is that of said entry date and for which the status variable is that of said status assignment variable and corresponds to an enabled right" (i.e. "the Service Key may be valid for a certain period of time" [column 8 lines 66-67].

Claim 3:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method

for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 2 above, further comprising,

- "prior to the entry operation proper of said defined access right, said method consists in addition, in said access control module device, in checking a presence, in said access control module device, of an entered access right corresponding to said defined access right and for which the status variable corresponds to the encoded value signifying right enabled or right disabled" (i.e. "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65];
- "on a positive response to said verification: in verifying the posteriority nature of said action date variable corresponding to an entry date in relation to the action date of said identical access right" (i.e. "the Service Key may be valid for a certain period of time" [column 8 lines 66-67];

- “on a positive response to said posteriority nature verification, performing an update of said action date variable of said identical access right, based on said action date corresponding to an entry date” (i.e. “the Service Key may be valid for a certain period of time” [column 8 lines 66-67];
- “assigning, to said status variable of said identical access right, the encoded value corresponding to an enabled right, allowing said entered access right to be enabled” (i.e. “the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs” [column 4 lines 50-65].

Claim 4:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. “a method

for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 2 above, further comprising,

- "on a negative response to said verification of the existence of an identical access right, said method including an update of said identical access right with said first entry of this access right, for which the action date corresponds to the entry date" (i.e. "the Service Key may be valid for a certain period of time" [column 8 lines 66-67].

Claim 5:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content

in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 1 above, further comprising,

- "for an operation to disable an access right entered in an access control module device, said action date variable of said access right management message corresponds to a disabling date and the status assignment variable is an encoded value corresponding to a disabled right, the disabling operation consisting in assigning, to said status variable of said entered access right, said encoded value corresponding to a disabled right and updating said action date of said entered access right based on said disabling date" (i.e. "the Service Key may be valid for a certain period of time. The decoder 701 may store the key as it surfs to other services, allowing the decoder to re-access the service with a still valid key without having to request the key again" [column 8 lines 66-67].

Claim 6:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one

entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 1 above, further comprising,

- "prior to the disabling operation proper, said method consists in: verifying the existence, on said access control module device, of an entered access right corresponding to said access right of said management message" (i.e. "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65];
- "verifying the posteriority nature of said action date variable corresponding to a disabling date with respect to said action date variable of said entered right" (i.e. "the Service Key may be valid for a certain period of time. The decoder 701 may store the key as it surfs to other services, allowing the decoder to re-access the service with a still valid key without having to request the key again" [column 8 lines 66-67].

Claim 7:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. “a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word”) [column 3 lines 10-20], as in Claim 1 above, further comprising,

- “for any status assignment variable of the management message corresponding to an erased access right and for any access right entered in the access control module device for which the status variable corresponds to an enabled right or a disabled right, said method consists at least in: an update of the action date of said entered right” (i.e. “the

Service Key may be valid for a certain period of time. The decoder 701 may store the key as it surfs to other services, allowing the decoder to re-access the service with a still valid key without having to request the key again" [column 8 lines 66-67];

- "an allocation, to said status variable of said entered access right, of said status assignment variable of the management message corresponding to an erased access right, said allocation operation forming, for said entered access right, a virtual erasure operation" (i.e. "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65].

Claim 8:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method

for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 7 above, further comprising,

- "the update and virtual erasure steps of said entered access right are preceded by a step to verify the existence, on said access control module device, of an entered access right corresponding to said access right of said management message, and a step to verify the posteriority of said action date variable of said management message with respect to said action date variable of said entered access right" (i.e. "the Service Key may be valid for a certain period of time. The decoder 701 may store the key as it surfs to other services, allowing the decoder to re-access the service with a still valid key without having to request the key again" [column 8 lines 66-67].

Claim 9:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one

entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 7 above, further comprising,

- "said virtual erasure operation is followed by a physical erasure operation of said access right" (i.e. "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65].

Claim 10:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key,

then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 9 above, further comprising,

- "said physical erasure operation is immediate or deferred" (i.e. "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65].

Claim 11:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a

cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 2 above, further comprising,

- "for an entered access right for which the status assignment variable corresponds to an erased access right, said method also consists in performing an update by first entry of this access right, said access right being assigned a status variable corresponding to an enabled right and for which the action date corresponds to the entry date" (i.e. "the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65].

Claim 12:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 5 above, further comprising,

- "for an entered access right for which the status assignment variable corresponds to an erased access right, said method also consists in performing an update by first entry of this access right, said access right being assigned a status variable corresponding to a disabled right and for which the action date corresponds to the entry date" (i.e. "the access requirements for the program are compared to the entitlements that the conditional

access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs" [column 4 lines 50-65].

Claim 13:

Candelore discloses a method for entering, disabling/erasing scrambled data access rights transmitted from a transmission center to at least one descrambling terminal to which is linked an access control module device equipped with a security processor, these access rights being entered in said access control module device, said scrambled data being subjected to an access control by periodic transmission of access control messages, conveying access criteria and a cryptogram of a control word that is changed periodically and encrypted using an operation key, then, in each security processor, conditionally upon verifying the true value of at least one entered access right against said access criteria, by decrypting the cryptogram of the control word using said operation key, transmitting the restored control word to the descrambling terminal and descrambling said scrambled data using said restored control word (i.e. "a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word") [column 3 lines 10-20], as in Claim 5 above, further comprising,

- “on a negative response to said verification of the existence of a corresponding access right, said method also consists in performing an update by first entry of this access right, for which the action date corresponds to a disabling date, said access right being assigned a status variable corresponding to a disabled right” (i.e. “the access requirements for the program are compared to the entitlements that the conditional access unit actually has...entitlements may state that the conditional access unit is entitled to view content...entitlements may also include one or more keys...entitlements also may define the time periods for which the conditional access unit may descramble programs” [column 4 lines 50-65].

Claim 14:

Candolore discloses an access control module device controlling access to scrambled data transmitted from a transmission center to at least one descrambling terminal to which is linked access control module device, but, Candolore does not explicitly disclose,

- “characterized in that it comprises, entered in the memory of this access control module device, at least one access right formed by a set of independent variables and of linked variables, comprising at least, in addition to an entered access right identification variable and a validity dates variable, an entered access right action date variable and a status variable having one of three encoded values signifying access right enabled, access right disabled or access right erased” although Candolore does suggest a method for securing control words, as recited below;

however, Candelore does disclose,

- “a method for securing control words is provided. The method includes receiving scrambled digital content in a descrambler integrated circuit. The method further includes receiving an encrypted control word in the descrambler integrated circuit, decrypting the encrypted control word using a key stored in a register circuit of the descrambler integrated circuit, and descrambling the scrambled digital content in the descrambler integrated circuit using the decrypted control word” [column 3 lines 10-20];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, “characterized in that it comprises, entered in the memory of this access control module device, at least one access right formed by a set of independent variables and of linked variables, comprising at least, in addition to an entered access right identification variable and a validity dates variable, an entered access right action date variable and a status variable that can have one of three encoded values signifying access right enabled, access right disabled or access right erased,” in the invention as disclosed by Candelore for the purposes of providing access control for subscriber content.

Claim 15:

Candelore discloses a module controlling access to scrambled data transmitted from a transmission center to at least one descrambling terminal to which is linked this access control module device, as in Claim 14 above, further comprising,

- “since said access control module device comprises a microprocessor card fitted with a security processor and a secured non-volatile programmable memory, said at least one

access right is entered in said secured non-volatile programmable memory" [FIG 7 illustrates a processor with memory used in access control of encrypted content & control words].

***Response to Arguments***

6. Applicant's arguments filed 08/03/2009 have been fully considered but they are not persuasive.

- The applicants' remarks with respect to, "...Candelore does not contain a teaching or a suggestion of forming an access right entered in an access control module device as a set of independent variables and linked variables, much less the access right action date variable and the status variable (access right enabled/disabled/erased)..." have been carefully considered but are non-persuasive based on the current claim language.
  - o It is noted that "independent variables and linked variables" have been defined as "independent variables and of linked variables, this set of variables comprising at least, in addition to an entered access right 10 identification variable and a validity dates variable, an entered access right action date variable and a status variable that can have one of three encoded values signifying access right enabled, access right disabled or access right erased" [applicants' Specification page 5] which would suggest that the variables can be any indication of an access right (i.e. entitlements as disclosed by Candelore).

- The applicants' remarks with respect to, "...the "validity time" disclosed in Candelore is not a teaching or a suggestion of an access right action date variable because a "period of validity" is different from a date that an "access right action is taken" and is used in an entirely different manner..." have been carefully considered but are non-persuasive.
  - o It is noted that the differences as argued between "validity time" and "action date" are not clear based on the current claim language. That is, a time period (i.e. validity time) for certain actions to be valid can be seen as the same if not similar to an action that is permitted during a certain time period (i.e. action date).
- The applicants' remarks with respect to, "...the "service key" described in Candelore (col. 8, lines 66-67) does not correspond to the "status variable of the access right," but, rather, corresponds to a prior art "operation key."..." have been carefully considered but are non-persuasive.
  - o The examiner has not equated "the service key" to the "status variable of the access right" but instead to "...access requirements for the program compared to entitlements that the conditional access unit actually has..." [column 4 lines 5-65].
- The applicants' remarks with respect to, "Candelore do not contain a teaching or a suggestion of an encoded value corresponding to an enabled access right, a disabled access right or an erased access right, much less a status assignment variable transmitted in an access right management message from a transmission center to descrambling terminals 1 access control modules" have been carefully considered but are non-persuasive.

- It is noted that the “entitlements” as disclosed by the prior art of record covers these aspects.
- The applicants’ remarks with respect to, “the cited passage from Candelore does not provide a basis for concluding that it would have been obvious to include the subject matter of claim 14, even prior to its amendment, in the invention as disclosed by Candelore “for the purposes of providing access control for subscriber content,” since Candelore already provided such access control even without the allegedly obvious modification thereof” have been carefully considered but are non-persuasive.
- The examiner notes that the intention of the motivation for Claim 14 was to show that although the prior art of record Candelore does not explicitly use the same language as the applicants, some degree of equivalence in function can be seen between the two based on the current claim language being broad enough to read on the same invention. The examiner suggests incorporating further narrowing claim language/limitations that would distinguish their invention from the prior art.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Oscar Louie whose telephone number is 571-270-1684. The examiner can normally be reached Monday through Thursday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at 571-272-4195. The fax phone number for Formal or Official faxes to Technology Center 2400 is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OSCAR A LOUIE/  
12/03/2009  
/Eleni A Shiferaw/

Application/Control Number: 10/506,538  
Art Unit: 2436

Primary Examiner, Art Unit 2436

Page 27